

A REVIEW OF SOME GENERIC NAMES IN THE ORDER LEPIDOPTERA

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In the preparation of our Catalogue of North American Lepidoptera we have determined to investigate the history of all generic names now in use, and others as far as they concern us, in order to be certain that the use of the terms is correct according to the principles laid down in the "International Rules of Zoological Nomenclature." We use Smallwood's edition of these rules, and are indebted to Mr. F. H. Benjamin for information on some later opinions, notably that dealing with Lamarck's citations of 1801 which have been accepted by some writers as valid fixations. We are informed by Mr. Benjamin that these are repudiated in an opinion of the International Committee on Nomenclature. This action is strictly in harmony with the body of the rules as applied to Lamarck's work.

The one other set of rules which we have considered is the "Entomological Code" of Banks and Caudell. We favor these rules, for they are stated with enviable clearness and conciseness, but feel that the International Rules should be followed by all zoologists, from the very nature of their origin. The only point of extreme difference in the two is that the Code does not permit a species to be the type of two different genera, unless, of course, it be the orthotype of the second, established through oversight after becoming the type of the first. While this simplifies the fixation of a type in some cases, it frequently makes a decision more difficult.

In the relatively small part of the order now examined, we find so many radical changes that we feel it wise to present our conclusions thus far to the entomological fraternity, so that the sharp criticism which we frankly expect may have time to bear fruit in a more or less definite general opinion. Our own attitude to this subject is that, while intensely interesting research, the entire problem is so purely accessory to the true aim of science that it should be reduced to a firm basis as

speedily as possible. This basis is established for us by the International Rules, and we are heartily in favor of working out the standing of our genera according to these rules, accepting whatever radical changes they produce, and turning a deaf ear to the cries of those who would continue to make personal opinion their ultimate guide.

ASCIIDÆ.

ASCIA Scopoli Logotype *Papilio monuste* Linn.

- 1777. Scopoli, Int. Hist. Nat. 434; *Crataegi, napi, sinapis, monuste, polybe*.
- 1872. Scudder, 4th Rept. Peab. Acad. 61, cites *monuste* as type.
- 1875. Id., Hist. Sk. 121-2, confirms this citation.
- 1918. Hampson, Nov. Zool. XXV, 385, cites *crataegi* as type.

Owing to Scudder's action in 1872 this genus must be regarded as valid, and will replace *Picris* in our fauna. As a result of this the family name becomes *Asciidæ*. Hampson uses *crataegi* as type, following the first species principle, which is not permissible under the International Rules. He arrives, however, at the same conclusion regarding the family name, which he spells *Asciadæ*.

SATYRIDÆ.

MEGISTO Hbn. Logotype *Papilio eurytus* Fab.

- 1818. Huebner, Verz. bek. Schmett. 54; *Cymelia (euritus), argante, euridice (canthus, camerta), acmenis*.
- 1868. Butler, Cat. Satyr. B. M. 14, Cites *eurytus (euritus, cymelia)* as type.
- 1872. Scudder, 4th Rept. Peab. Acad. 27, follows Butler.
- 1875. Id., Hist. Sk. 213, says that this was incorrect because "*eurytus* is strictly congeneric with *penelope*, the type of *Cissia*," and cites *acmenis* as type.

Butler's citation of *eurytus* was valid and Scudder's later citation of *acmenis ultra vires*. As a result we must use *Megisto* to replace *Cissia*, type *penelope*.

ARGUS Scopoli. Logotype *Papilio eurydice* Joh.

- 1777. Scopoli, Int. Hist. Nat. 432; a heterogeneous group including *eurydice*.
- 1872. Scudder, 4th Rept. Peab. Acad. 27, cites *eurydice* as type.
- 1875. Id., Hist. Sk. 118, discards this genus because of its original heterogeneous nature. This may have been a desirable course, but it seems entirely indefensible, since the genus had already been given a valid type and definite generic usage in the modern sense.
- 1888. Id., Butt. New. Eng. I, 187, under *Satyrodes*, cites *Argus* Scudder (not Scopoli).

We see no way to avoid using this genus in place of *Satyrodes*.

HELICONIUS Linn. Logotype *Papilio psidii* Linn.

- 1758. Linneaus, Syst. Nat. Ed. X, 458. Many species, including *Danaidæ, Parnassiinæ* and *Heliconiinæ* (of authors).
- 1810. Latreille, Consid. Gen. 440, cites *polymnia* and *horta* as types. Neither of these species belongs to *Heliconius* Auct.

1872. Crotch, Cist. Ent. 1, 60, cites *psidii* as type, giving Lamarck as authority. While Lamarck's work does not actually fix the type, Crotch's definitely cites "Type *H. psidii* Linn.," and we believe that his must be regarded as a valid fixation.
1875. Scudder, Hist. Sk. 185, cites *Antiochus* as type, but credits the genus to Latreille and says that Crotch was in error in referring the genus back to Linnaeus, Linnaeus' *Heliconii*, however, form as valid a genus as any other of his subdivisions of *Papilio*, and he does use the singular, *Heliconius*, in the page headings. Hence we regard this as truly a Linnean genus, and Scudder's action as *ultra vires*.
1913. Seitz, Macrolep. (2), V, 377, uses *Heliconius* Latr.

As a result of this history of *Heliconius*, we have concluded that it must be dropped from our lists, for *psidii* is a Danaid and no congeneric species is found in our fauna. The subfamily *Heliconiinae* must be renamed and since Hampson has already applied the name *Eueidinae* (which he spells, incorrectly, *Euidinae*), we adopt that term. Since *Heliconius* does not take the place of *Danaus* we see no reason to change the family name *Danaidae*.

MIGONITIS Hbn. Logotype *Papilio erato* Linn.

1816. Huebner, Verz. bek. Schmett, 12; *erato* and others.
1875. Scudder, Hist. Sk. 218, cites *erato* as type.

Migonitis takes the place of *Heliconius* Auct.

DRYAS Hbn. Haplotype *Papilio paphia* Linn.

1806. Huebner; Tentamen. *Paphia* sole species and therefore type.

ARGYNNIS Fab. Logotype *Papilio paphia* Linn.

1807. Fabricius, Ill. Mag. VI, 283, *paphia*, *cynara*, *cethosia*, *aglaia*, *liriope*, *morpheus*, *hermes*.
1810. Latreille, Consid. Gen. 440, cites *paphia* as type.
1816. Dalman, Vetensk. Akad. Handl. XXXVII, 57-66, cites *adippe* as type.
1830. Curtis, Brit. Ent. Lep. I, 290, cites *aglaia* as type.
1875. Scudder, Hist. Sk. 118; cites *aglaia* as type and says that Latreille cited *paphia* and *cinxia*, whereas the latter appears to be mentioned in synonymy. Other writers have followed Latreille and Curtis.

We regard *paphia* as the type of *Argynnis*, though there may be some slight doubt concerning Latreille's citation of both *paphia* and *cinxia*. If it can be definitely shown that these were cited as two types, Dalman's fixation must prevail. All appear to be congeneric. The Tentamen genus, *Dryas*, must take the place of the more familiar name in either case, however, if we are to observe the generic limits adopted by most writers.

LEMONIAS Hbn. Haplotype *Papilio maturna* Linn.

1806. Huebner, Tentamen, *maturna* sole species and therefore type.

MELITAEA Fab. Logotype *Papilio cinxia* Linn.

1807. Fabricius, Ill. Mag. VI, 284; *lucina*, *cinxia*, *cynthia*, *maturna*.
1816. Dalman, Vetensk. Akad. Handl. XXXVII, 57, cites *athalia* as type, but incorrectly, for it was not included by Fabricius.
1840. Westwood, Gen. Syn. 88, cites *cinxia* as type. This appears to be the first valid type fixation.

We have felt some doubt whether *Lemonias* of the Tentamen or *Lemonias* of the Sammiung was first published, but Huebner's statement in the preface to the Verzeichniss to the effect that the Tentamen was drawn up as a basis for the other work, leads us to the conclusion that the Tentamen has priority, hence *Lemonias* becomes a nymphalid genus and takes the place of *Melitæa*. This usage is not uncommon in the literature.

HAMADRYAS Hbn. Haplo type *Papilio io* Linn.

1806. Huebner, Tentamen. *Io* sole species and therefore type.

Io, *urticæ* and *antiopa* are generally regarded as congeneric, hence *Hamadryas* must be used for the group, supplanting both *Aglais* Dal. and *Euvanessa* Scud.

CYNTHIA Fab. Logotype *Papilio cardui* Linn.

1807. Fabricius, Ill. Mag. VI, 281; *cardui* and other species.

1840. Westwood, Gen. Syn. 87, cites *cardui* as type.

1872. Crotch, Cist. Ent. I, 66, also cites *cardui*, but the date of fixation which he gives is not in accordance with modern rules.

1875. Scudder, Hist. Sk. 152, says that *cardui* cannot be the type because "it is strictly congeneric with *atalanta*—type of *Vanessa*," a view which is obviously untenable. He cites *arsinoë* as type.

Vanessa Fab. Logotype *Papilio atalanta* Linn.

1807. Fabricius, Ill. Mag. VI, 281; *io*, *atalanta*, *urticæ*, *levana*.

1810. Latreille, Consid. Gen. 440, cites *atalanta* as type.

1840. Westwood, Gen. Syn. 87, cites *io* as type, incorrectly.

As a result of Scudder's peculiar reasoning, or through some strange oversight, *Cynthia* has had no place in our nomenclature. It immediately precedes *Vanessa* on the same page in Fabricius work, and the types as they were originally fixed are congeneric, so that we are forced to replace the more common term with it. *Pyrameis*, type *atalanta* also falls.

CALICORE Hbn. Logotype *Papilio codomannus* Fab.

1818. Huebner, Verz. bek. Schmett, 41; *astarte*, *clymena*.

1820. Billberg, Enum. Ins. 78; *clymena*, haplo type of *Diaethria*, thus fixing *astarte* as type of *Callicore*.

1875. Scudder, Hist. Sk. 130, in spite of previous use of this genus for species allied to *clymena*, cites *codomannus* (*astarte*) as type, and notes also, on P. 135, that *Catagramma* falls before it.

We have sought some genus of which *codomannus* might have become the valid type before 1820 but without success. Such an action would constitute a valid fixation of *clymena* as type of *Callicore* under Opinion 6 of the International Rules, and permit its retention in the customary usage. As the matter stands, however, it will replace *Catagramma*, which is not represented in our fauna. *Diaethria* Billberg, type *Papilio clymena* Cram. replaces *Callicore*.

CELTIPHAGA *nom nov.* Type *Apatura celtis* Bdv. & Lec. New name for *Chlorippe* Auct.

Most writers agree on the generic distinctness of the North American species hitherto referred to *Chlorippe* or *Apatura* from the true European *Apatura*. Godman and Salvin (Biol. Cent. Am. Rhop. I, 312, 318) also indicate that they regard the North American species as distinct from those properly referable to *Apatura*, but use *Doxocopa* for the single allied species of Central America. *Chlorippe* is properly applied to a group of species which appear to be congeneric with *agathina*. Whatever application is to be made of these names, *Chlorippe* must fall before *Doxocopa*, for Scudder cites *agathina* as the type of *Chlorippe* in the Historical Sketch, and *polyxena* as the type of *Doxocopa*, but he had previously (Syst. Rev. 9) cited *agathina* as type of this genus, and this must stand. In the Bulletin of the Buffalo Society of Natural Science, Vol. II, p. 248, 1875, the same writer cites *laurentia* as the type of *Chlorippe*, but this is *ultra vires* in view of his former action. We have been unable to find earlier type fixations for either of the two genera, and it has proven equally impossible to find a described genus which will apply to *cellis* and its allies, so that a new name seems necessary.

CALEPHELIS G. & R. Orthotype *Papilio caeneus* Linn.

1869. Grote and Robinson, Trans. Am. Ent. Soc. II, 310; *caeneus* (as *caeneus*) designated type.

According to Opinion 14 of the International Rules, the type of this genus must be *caeneus* Linn. as specified by Grote and Robinson, and not *virginiensis*, which they erroneously placed as a synonym of *caeneus*, and which has been cited as the type by later writers. We are unable to find any other described genus which is applicable, and would suggest the anagram LEPHELISCA, type *Erycina virginiensis* Guer, to take the place of *Calephelis* Auct.

LYCAENA Fab. Logotype *Papilio phlaeas* Linn.

1807. Fabricius, Ill. Mag. VI, 285. Includes Lycaenids of all three subfamilies.

1815. Oken, Lehrb. I, 717, uses for blues and a few other species.

1824. Curtis, Brit. Ent. Lep. I, 12, cites *phlaeas* as type.

1832-3. Swainson, Zool. Ill. (2), III, 132, follows Curtis.

1840. Westwood, Gen. Syn. 88, also follows Curtis.

1872. Scudder, 4th Rept. Peab. Acad. 57, also cites *phlaeas*.

1875. Id., claims that the citation of *phlaeas* was *ultra vires* because of Oken's restriction, and cites *endymion* as type. Later writers have used it for the blues also.

It is unfortunate that the accustomed use of this genus must be so radically changed, but this is inevitable if we follow the International Rules, for Oken's action is not recognized as a valid restriction, and Curtis' specification of *phlaeas* as type was legitimate. It is the earliest citation of a type which we have been able to find, and is abundantly substantiated by later writers.

The effect of this change on the names of the subfamilies must also be taken up. Since *Chrysophanus* is a synonym, the subfamily Chrysophaninae of the "Check List" must fall, and logically becomes the LYCÆINÆ. The blues, formerly the Lycaeninae, must have a new

name. In the absence of any rules on this point we prefer to take *Plebejus* Linn. as the stem for this name, forming the subfamily PLEBEJINÆ, rather than follow Van Duzee's rules and base the name upon the genus which replaces *Lycæna*. The family name remains, of course, LYCÆNIDÆ.

URBANUS Hbn. Haplotype *Papilio malvæ* Linn.

1806. Huebner, Teutamen, *malvæ* sole species and therefore type.

In view of the change in the application of *Hesperia* set forth under that genus, *Urbanus* takes the place of *Hesperia* Auct.

ERYNNIS Schrank. Logotype *Papilio tages* Linn.

1801. Schrank, Fauna Boica II, I, 157. *Comma*, *tages*, *malvæ* and others.

1872. Scudder, 4th Rept. Peab. Acad. 71, cites *tages* as type.

1875. Id., Hist. Sk. 167, claims that this was *ultra vires*, and that *comma* became type in 1832.

Unless a type was cited previous to 1872 this genus must replace *Thanaos*, and we have been unable to find such a citation.

The removal of *Hesperia* from this subfamily makes it necessary to establish a new name, which must be formed from one of the genera just discussed. According to Van Duzee's suggestions, it should become the subfamily URBANINÆ. *Erynnis*, the oldest included genus, would form the name *Erynninæ*. It seems to us that there is little choice in the matter, so we are adopting the former.

Thymele, hitherto applied by modern writers to a neotropical genus allied to *Telegonus*, will fall before *Erynnis*, as also will *Thanaos*. *Tages* was designated as the type of *Thymele* by Westwood (1840, Gen. Syn. 88) and Scudder's later actions (Hist. Sk. 282) were *ultra vires*.

HESPERIA Fab. Logotype *Papilio comma* Linn.

1793. Fabricius, Ent. Syst. III, (1), 258, corresponds to Linnaeus' *Papiliones plebeji*.

1798. Cuvier, Tabl. Elem. 592, cites only *malvæ* in this genus.

1810. Latreille, Consid. Gen. 440, cites *proteus*, *malvæ* and *steropes* as "types."

1816. Dalman, Vetensk. Akad. Handl. XXXVII, 200, cites *comma* as type.

1820-21. Swainson, Zool. Ill., (1), I, 28, cites *comma* as type.

1833. Curtis, Brit. Ent. Lep. II, 442, also cites *comma*.

1870. Butler, Ent. Mo. Mag. VII, 58, cites *exclamatoris*, erroneously.

1872. Crotch, Cist. Ent. 1, 62, cites *malvæ* as type, giving Cuvier, 1798, as his authority.

1872. Scudder, 4th Rept. Peab. Acad. 73, cites *malvæ* as type.

1875. Id., Hist. Sk. 187, does same.

We have not been able to examine Cuvier's Tableau Elementaire, but in 1832 (An. Kingdom XV, 594, footnote) he refers to Fabricius' Ent. Syst. for "the other species," after citing *malvæ* as sole example of *Hesperia*. This is rather conclusive evidence that there was no intention to restrict in the mind of Cuvier, even though his action in 1798 were admissible as a restriction. Aside from this we find nothing on which to base the prevalent use of *malvæ* as type, and it seems that the genus properly applies to the species now placed in *Pamphila*. Westwood, in 1840, (Gen. Syn. 88) cited *comma* as the type of *Pamphila* so

that it is synonymous with *Hesperia*. This necessitates changing the name of the subfamily *Pamphilinae* to HESPERIIDÆ. As in the case of the *Lycanidæ*, we feel that it is both unnecessary and inadvisable to change the name of the family, as has been done by Hampson (Nov. Zool. XXV, 386).

SPHINGIDÆ.

PHLEGETHONTIUS Hbn. Logotype *Sphinx sexta* Joh.

- 1820. Huebner, Verz. bek. Schmett, 140, *cluentius*, *carolina* and others.
- 1892. Kirby, Cat. Lep. Het. I, 688, cites *sexta* (*carolina*) as type.
- 1903. Rothschild and Jordan, Rev. Sphing. I, 52, cite *cluentius* as type and place the name under *Cocytius*.

Kirby's appears to be the first type fixation, and will re-establish the use of this genus for the species now listed under *Protoparce*.

ATREIDES Holland, new name for *Atreus* Grt., type *Sphinx plebeja* Fab., pre-occupied in *Arachnida*.

- 1903. Holland Moth Book 49, calls attention to the incorrect use of *Atreus* by Rothschild and Jordan and proposes the new name, which has since been overlooked.

HYLOICUS Hbn. Logotype *Sphinx pinastris*, Linn.

- 1820. Huebner, Verz. bek. Schmett, 138, *pinastris* and others.
- 1873. Grote, Bull. Buff. Soc. Nat. Sci. I, 27, cites *pinastris* as type.

Takes the place of *Sphinx*, which has been incorrectly used as explained under that genus.

PHRYXUS Hbn. Logotype *Sphinx caicus* Cram.

- 1820. Huebner, Verz. bek. Schmett, 137; *livornica* (*lineata*) and *caicus*.
- 1892. Kirby, Cat. Lep. Het. I, 697, cites *caicus* as type.
- 1903. Rothschild and Jordan, Rev. Sphing. II, 713, cite *lineata*, following the first species principle.

Grammodia R. & J. Orthotype *Sphinx caicus* Cram.

- 1903. Rothschild and Jordan, Rev. Sphing. I, 371; *caicus* designated type.

This matter needs no further explanation.

CALLIOMMA Wlk. Logotype *Sphinx parce* Fab.

- 1856. Walker, List. Lep. Ins. B. M. VIII, 108, *nomius*, *licastus* and others.
- 1892. Kirby, Cat. Lep. Het. 646, cites *licastus* as type. This species, according to R. & J., is synonymous with *parce* Fab.
- 1903. Rothschild and Jordan, Rev. Sphing. I, 387, cite *nomius* as type.

Rothschild and Jordan use *Hemeroplanes* Hbn. for *parce*, citing *pan* as type. Kirby in 1892, however, designated *triptolemus* as type of this genus, so that it replaces *Leucorhampha* R. & J., dropping out of our fauna, and is itself replaced by *Calliomma*.

HEMARIS Dalman. Orthotype *Sphinx fuciformis* Linn.

- 1816. Dalman Vet. Akad. Handl. XXXVII, 207, *fuciformis* designated type.

Haemorrhagia G. & R. Logotype *Sesia thysbe* Fab.

- 1865. Grote and Robinson, Proc. Ent. Soc. Phil. V, 149; *gracilis*, *ruficaudis*, *thysbe*, *fuscicaudis*.
- 1873. Grote, Bull. Buff. Soc. Nat. Sci. I, 18, cites *thysbe* as type.

We find it utterly impossible to agree with the reasoning of Rothschild and Jordan (Rev. Sphing, I, 438) regarding *Hemaris*. Opinion 10 of the International Rules deals with just such cases, and permits the use of *Hemaris* in place of *Hæmorrhagia*.

SPHINX Linn. Logotype *Sphinx euphorbiæ* Linn.

- 1758. Linnaeus. Syst. Nat. Ed. X, 489, includes all hawk-moths.
- 1810. Latreille, Consid. Gen. 440, cites *euphorbiæ* as type.
- 1820-21. Swainson, Zool. Ill. (1), II, 81, cites *convolvuli* as type.
- 1828. Curtis, Brit. Ent. Lep. I, 195, cites *ligustri* as type.
- 1873. Grote, Bull. Buff. Soc. Nat. Sci. I, 25, follows Curtis.
- 1892. Kirby, Cat. Lep. Het. I, 692, also designates *ligustri*.
- 1903. Rothschild and Jordan, Rev. Sphing. I, 313, cite *ocellata*.
- 1917. Barnes and McDunnough, Check List 24, apply to species now placed in *Hyloicus*, without any explanation.

Latreille's fixation, in spite of the fact that it does not agree with subsequent usage, must be regarded as the first valid type fixation. With *euphorbiæ* as type the genus takes the place of *Celerio*, type *Sphinx gallii* Roth.

SATURNIIDÆ.

SAMIA Hbn. Logotype *Phalaena cynthia* Dru.

- 1820. Hübner, Verz. bek. Schmett. 156, *cynthia*, *cecropia*, *promethea*.
- 1855. Walker, List. Lep. Ins. B. M. V, 1222, uses for *cecropia*, *promethea*, and others.
- 1865. Grote, Proc. Soc. Phil. V, 228, cites *cynthia* as type.
- 1874. Id.; Proc. Am. Phil. Soc. XIV, 258, under *Philosamia*, mentions Walker's use of the genus and cites *cecropia* as type.
- 1886. Smith, Proc. U. S. N. M. IX, 416, uses for *cynthia* alone.
- 1892. Kirby, Cat. Lep. Het. I, 750, cites *cecropia* as type.

Philosamia Grt. Logotype *Phalaena cynthia* Dru.

- 1874. Grote, Proc. Am. Phil. Soc. XIV, 258, *cynthia* designated type.
- 1892. Kirby, Cat. Lep. Het. I, 748, cites *walkeri* as type.
- 1912. Packard, Mon. Bomb. Moths. N. A. III, 239.

Walker's action in 1855 was in no sense a restriction so far as the selection of a type is concerned, and Grote's first designation of *cynthia* is therefore valid and his later action in specifying *cecropia* as type *ultra vires*. In Packard's Monograph *Philosamia* is used for *cynthia* and allied species, with *Samia* quoted in synonymy. Under *Samia*, used for *cecropia* and allies, the references are by the editors, so it would seem that Packard recognized the use we make of the genus as correct.

PLATYSAMIA Grt. Logotype *Bombyx cecropia* Linn.

- 1865. Grote, Proc. Ent. Soc. Phil. V, 228; *cecropia*, *columbia*, *californica*.
- 1874. Id., Proc. Am. Ent. Phil. Soc. XIV, 258, under *Philosamia*, says that this genus should fall before *Samia*.
- 1912. Cockerell, in Packard's Mon. Bomb. Moths N. A. III, 211, follows Grote's action of 1874.

It seems that no type has ever been specified for *Platysamia*, so we select *cecropia*. The three species originally included are congeneric, so there can be no mistaken application of the genus, which takes the place of *Samia* as commonly used.

ACTIAS Leach. Logotype *Phalaena luna* Linn.

1815. Leach, Zool. Misc., II, 25; *luna* and *selene*.
 1874. Grote, Proc. Am. Phil. Soc. XIV, 257, cites *luna* as type.
 1892. Kirby, Cat. Lep. Het. I, 766, cites *selene* as type.
 1912. Packard, Mon. Bomb. Moths N. A. III, 181, uses for *selene*.

Tropaea Hbn. Logotype *Echidna caudata selene* Hbn.

1820. Huebner, Verz. bek. Schmett. 152; *luna*, *selene*.
 1864. Packard, Proc. Ent. Soc. Phil. III, 379, uses for *luna*, but cites no type.
 1892. Kirby, Cat. Lep. Het. I. 765, separates from *Actias*, but cites no type.

Plectropteron Hutt. Haplotype *Echidna caudata selene* Hbn.

1864. Hutton, Ann. & Mag. Nat. Hist. XVII, 60; *dianæ* (syn. of *selene*) sole species and therefore type.

These three genera offer a nice problem in type fixation. When *selene* became type of *Plectropteron* in 1846, the types of one or both of the other two genera were automatically fixed as *luna*. A possible solution is that *luna* became the type of *Actias*, since that genus takes priority over *Tropaea*, and that either species could then be selected as type of *Tropaea*. Since Grote later cited *luna* as the type of *Actias*, everything favors this fixation. If it be thought desirable to separate *selene* and *luna* generically, the selection of a type for *Tropaea* becomes of some importance. We have been unable to find any type specified, so we designate *selene* in order that the earlier names may stand. Hampson, Rothschild and other writers regard *selene* and *luna* as congeneric, in which we follow them.

CERATOCAMPIDÆ.

EACLES Hbn. Logotype *Attacus imperialis* Dru.

1820. Huebner, Verz. bek. Schmett. 153; *imperatoria* and others.
 1874. Grote, Proc. Am. Phil. Soc. XIV, 260, cites *imperialis* (*imperatoria*) as type.

We are unable to find any previous type fixation, and the name is not preoccupied, hence there appears to be no reason why it should not apply to the species now listed in *Basilona*. We are unable to find any designation of a type for the latter genus, and take this opportunity to suggest *cacicus*, which is congeneric with *imperialis*, as also is the remaining species, *ducalis*, according to Packard.

SYNTOMIDÆ.

PSEUDOMYA Hbn. Logotype *Glaucopsis tipulina* Hbn.

1820. Huebner, Verz. bek. Schmett. 124; *melanthus*, *tipulina*, *temenus*, *eacus*.
 1892. Kirby, Cat. Lep. Het. I. 138, cites *tipulina* as type.
 1898. Hampson, Cat. Lep. Phal. B. M. I, 262, cites *melanthus* as type.

Owing to Kirby's designation of *tipulina*, this genus will replace *Saurita* in Hampson's Catalogue, and is not represented in our fauna. Its place is taken by

PSEUDOCHARIS Druce. Orthotype *P. naenia* Druce.

1884. Druce, Biol. Cent. Am., Lep. Het. I, 56, *P. naenia* designated type.

ARCTIIDÆ.

Nolina.

ROESELIA Hbn. Logotype *Tinea cucullatella* Linn.

1826. Huebner, Verz. bek. Schmett. 397; *togatulana*, *cucullatella* and others.

1874. Grote, Bull. Buff. Soc. Nat. Sci. II, 152, cites *cucullatella* as type.

1900. Hampson, Cat. Lep. Phal. B. M. II, 51, cites *togatulalis* as type.

We find no objection to Grote's fixation of *cucullatella* as type, and therefore sink this genus to *Nola*. The next available name for the species allied to *togatulalis* is *Sarbena* Wlk., Jn. Linn. Soc., Zool. VI, 137, 1862. We have not been able to consult the original description, but have found no type fixations to conflict with that of Hampson, who designates *S. lignifera* Wlk. and makes the name a synonym of *Ræselia*.

LITHOSIINÆ.

EUDESMIA Hbn. Haplotype *E. ruficollis* Hbn.

1824? Huebner, Samml. exot. Schmett. II, pl. 400; *ruficollis* sole species and therefore type.

This genus should be used for the North American species now listed under *Cisthene*.

CISTHENE Wlk. Logotype *C. subjecta* Wlk.

1854. Walker, List. Lep. Ins. B. M. II, 533; *trisinna*, *subjecta*.

1874. Grote, Bull. Buff. Soc. Nat. Sci. II, 151, cites *subjecta* as type.

1892. Kirby, Cat. Lep. Het. I, 288, follows Grote.

1900. Hampson, Cat. Lep. Phal. B. M. II, 243, cites *trisinna* as type.

There is nothing contrary to the International Rules in Grote's action in 1874, so we restore *Cisthene* to its former place, with *Illice* in synonymy.

HAEMATOMIS Hampson, 1900, Cat. Lep. Phal. B. M. II, 514.

This name was spelled *Haematomonis* in the Check List (p. 31), but neither in Hampson's text nor index does it appear in that form.

ARCTIINÆ

PHÆGOPTERA, H. S. Logotype *P. histrionica* H. S.

1853. Herrich-Schaeffer, Ausser. Schmett. 78, ff. 58-68; *histrionica* and other species.

1892. Kirby, Cat. Lep. Het. I, 212, cites *histrionica* as type.

Phegoptera H. S.

1853. Herrich-Schaeffer, op. cit. 16; no species mentioned.

Hampson (Cat. Lep. Phal. B. M. III, 117) discards *Phegoptera* H. S. as an undescribed genus and does not mention *Phægoptera*. The two names were doubtless intended to be the same, but the latter alone is valid. It takes the place of *Opharus* Wlk., type *procroides* (sole sp.).

PARASEMIA Hbn. Logotype *Bombyx festiva* Bock.

- 1822. Huebner, Verz. Bek. Schmett. 181, *plantaginis* and *lapponica (festiva)*.
- 1828. Stephens, Ill. Brit. Ent., Haust. II, 72, used *plantaginis* as the sole species for his new genus *Nemeophila*, thus fixing the type of *Parasemia* as *festiva*.
- 1892. Kirby, Cat. Lep. Het. I, 250, cites *plantaginis* as type.
- 1901. Hampson, Cat. Lep. Phal. B. M. III, 458, cite *plantaginis* also.

This case is covered by Opinion 6 of the International Rules. With *festiva* as type *Parasemia* supersedes *Hyphoraia* Huebner, type *testudinaria* Four.

NEMEOPHILA Stephens. Haplotype *Bombyx plantaginis* Linn.

- 1828. Stephens, Ill. Brit. Ent. Haust. II, 72; *plantaginis* sole species. *Nemeophila* replaces *Parasemia* for reasons stated under that genus.

AGARISTIDÆ vs. PHALÆNOIDIDÆ.

Hampson's contention that *Phalænoides* should be the type genus of this family finds no support in the International Rules, which are disagreeably lacking on the point, and it conflicts directly with Van Duzee's recommendations. Since *Agarista* does not fall before *Phalænoides* we prefer to retain the older name, *Agaristidæ*.